Sun microsystems

PRODUCT MARKETING

NAFO

Solutions For Sales

U.S. Hardware Pricing Summary Guide
May 20, 1997

http://nafo.corp/pm

<u>**CAUTION:**</u> This is not an official Sun price list. Unlike the End User and Reseller U.S. Price Lists, it does not contain configuration, licensing, warranty, ordering and other essential information. Please consult the official price lists, or contact your Sun Sales Representative or Authorized Reseller before placing an order.

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Solaris Licensing
Please refer to the Software Pricing Summary Guide

Workstations & Workgroup Servers
Section 1

- *Low-cost ''thin client" network computer*
- *Zero administration at the desktop*
- *Runs only 100% pure Java applications*
- *Write once, run anywhere*
- *Ease of application distribution across the enterprise*
- *Enhanced security*
- *100-MHz microSPARC-II for workstation-class performance*
- *10Base-T for workstation-class bandwidth*

JAVA

JAVASTATION SYSTEM

The JavaStation is offered with 5 memory configurations and 7 initial Country Kits. All Country Kits contain a North American keyboard with a localized power cord.

MONITOR OPTIONS

Three monitor choices are available: 14" color, 17" color, and no monitor (headless config.)

SOFTWARE

Sun is offering the first versions of the JavaStation Software Environment free of charge. This software contains JavaOS, HotJava Browser and JavaStation boot services and administration tools. The software is be available through the Web (http://www.sun.com/javastation). Note that it is necessary to install this software package on a server running Solaris 2.5 in order to run the JavaStations in a network.
The second version of the JavaStation Software Environment, which will include Sun's extended desktop user environment, HotJava Views, will be available in Q3FY97. The software will be distributed on a CD and through the Web. Pricing to be announced.

OPTIONS

The only option offered with the JavaStation is an X-option memory upgrade. This option is intended as a post-purchase option and should not be used for initial orders. Ordering memory as part of the system will ensure that the memory arrives preinstalled.

GENERAL ORDERING NOTES

<u>Licenses</u> - The JavaOS and HotJava Browser license come standard with every system.
<u>Media</u> - The JavaStation pulls all its software from a local boot server over the network. One copy of JavaStation Software Environment is required per site. This environment requires a Sun server running Solaris 2.5 or a Netra j server in each subnet.
<u>Memory</u> - JavaStation has a total of 4 available memory slots. 8MB configuration uses 2 x 4MB SIMMs and 2 slots; 16MB configuration uses 4 x 4MB SIMMs and all 4 slots; 32MB configuration uses 2 x 16MB SIMMs and 2 slots; 40MB configuration uses 2 x 4MB and 2 x 16MB SIMMs and all 4 slots; 64MB configuration uses 4 x 16MB SIMMs and all 4 slots. SIMMs must be added in pairs of equal capacity.

JavaStation

Part Number	Description	List Price	Discount Category
JJ -8- 01 50	**JavaStation, 8MB,** U.S. Country Kit Universal Country Kit	$742	G
JJ -16-01 50	**JavaStation, 16MB,** U.S. Country Kit Universal Country Kit	$862	G
JJ -32-01 50	**JavaStation, 32MB,** U.S. Country Kit Universal Country Kit	$1,102	G
JJ -40-01 50	**JavaStation, 40MB,** U.S. Country Kit Universal Country Kit	$1,222	G
JJ -64-01 50	**JavaStation, 64MB,** U.S. Country Kit Universal Country Kit	$1,582	G
MONITORS **(Systems may be ordered without monitors for customers wishing to use their existing PC monitors)**			
X7114A	14" color monitor for JavaStation	$253	G
X7104A	17" color monitor for JavaStation	$703	G
MEMORY UPGRADES			
X7011A	8MB memory upgrade for JavaStation	$120	A
X7012A	32MB memory upgrade for JavaStation	$420	A

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	SPARCstation 5
Packaging	Desktop
Performance SPECint95 SPECfp95 SPECbase_int95 SPECbase_fp95 AIM 3 LADDIS	Model 170 3.32 2.91 3.19 2.68 N/A N/A
Performance Architecture Clock rate Cache on-chip Cache external No. of Processors	TurboSPARC (microSPARC compatible) 170MHz 16KB I-cache, 16KB D-cache 512KB 1
System Memory Standard Maximum Memory type Bandwidth Total memory slots SIMM size	32MB 256MB 60ns JEDEC parity 64 bits 8 32MB
Disk Storage SCSI bandwidth Standard Maximum internal Maximum external	10M/sec. 2.1GB 4.2GB 118GB
I/O Architecture SBus slots Graphics (UPA Slots) Serial ports Parallel ports Audio Speaker	3 (32-bit, 22MHz) No 2 (fully sychronous) 1 (cable required) 16-bit Internal
Network Ports AUI Ethernet Twisted-pair Ethernet ISDN BRI	Yes (with opt. adapter cable) Yes No
Supported Graphics Options	S24, TurboGX, TurboGX Plus
Solaris License	Solaris 2.3 Ed. II or later Solaris 1.1.1 ver. B

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SPARCstation 5 - Model 170

Model 170 with One 170MHz TurboSPARC processor:

Part Number	Description	List Price	Discount Category
S5RX1-170-32-P17	17" LC color monitor, TurboGX, 32MB, 2.1GB internal fast SCSI-2 disk	$4,695	A
S5F24-170-32-P17	17" color monitor, S24 graphics, 32MB, 2.1GB internal fast SCSI-2 disk	$5,195	A
S5FX1-170-32-P17	17" color monitor, TurboGX, 32MB, 2.1GB internal fast SCSI-2 disk	$5,195	A
S5FX4-170-32-P17	17" color monitor, TurboGXplus, 32MB, 2.1GB internal fast SCSI-2 disk	$6,195	A
S5T24-170-32-P17	20" color monitor, S24 graphics, 32MB, 2.1GB internal fast SCSI-2 disk	$5,895	A
S5TX1-170-32-P17	20" color monitor, TurboGX, 32MB, 2.1GB internal fast SCSI-2 disk	$5,895	A
S5TX4-170-32-P17	20" color monitor, TurboGXplus, 32MB, 2.1GB internal fast SCSI-2 disk	$6,895	A

NOTES:
- Requires Solaris 2.3, Hardware: 5/94 or higher. Solaris 1.1.1 version B is available for TurboGX and TurboGXplus models.
- All system orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section of the End User Price Book.
- For AUI Ethernet support, order the AUI adapter cable (X981A).
- The Solaris Internet Access PlusPack (IAPP-2.0-P) can be ordered at no charge with initial Workstation order.
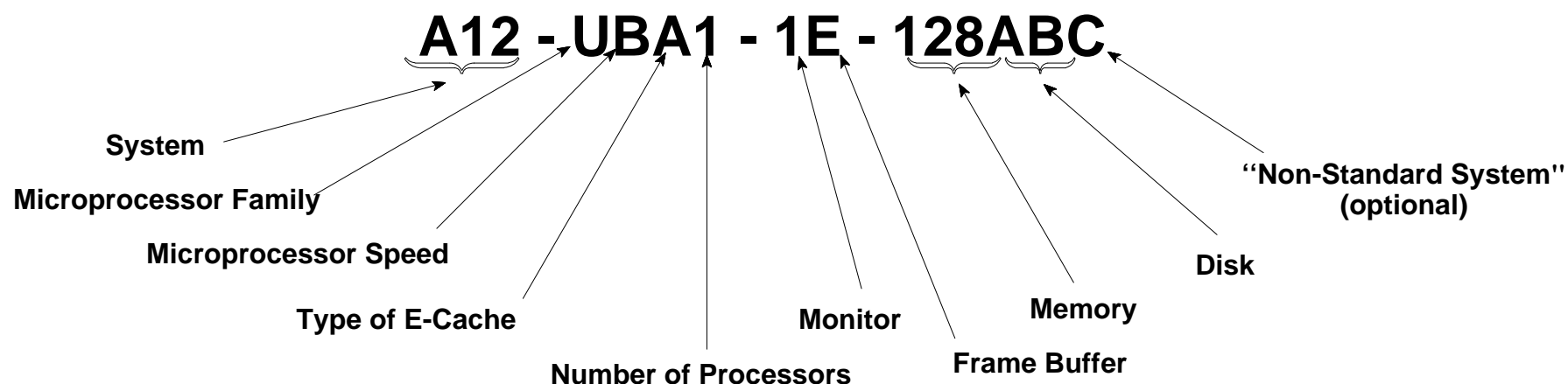
Upgrades to SPARCstation 5 - Model 170:

From	Part Number and Description	List Price	Discount Category
SLC, ELC, IPC, SPARCstation 1/1+, Classic	**UGFS-S5RX170-P17** Full system upgrade to SPARCstation 5 Model 170 with modified system enclosure, 17" LC color monitor, TurboGX, 32MB, and 2.1GB internal fast SCSI-2 disk.	$4,495	A*
SLC, ELC, IPC, SPARCstation 1/1+, Classic	**UGFS-S5FX170-P17** Full system upgrade to SPARCstation 5 Model 170 with modified system enclosure, 17" color monitor, TurboGX, 32MB, and 2.1GB internal fast SCSI-2 disk.	$4,745	A*
SLC, ELC, IPC, SPARCstation 1/1+, Classic	**UGFS-S5TX170-P17** Full system upgrade to SPARCstation 5 Model 170 with modified system enclosure, 20" color monitor, TurboGX, 32MB, and 2.1GB internal fast SCSI-2 disk.	$5,445	A*
IPX, LX, SPARCstation 2, SPARCstation 10	**UG4/75-S5170-P17** Chassis upgrade to SPARCstation 5 Model 170 with modified system enclosure, TurboGX frame buffer, 32MB, and 2.1GB internal fast SCSI-2 disk.	$4,095	A*
IPX, LX, SPARCstation 2, SPARCstation 10	**UGS2-S5TX4170-P17** Chassis upgrade to SPARCstation 5 Model 170 with modified system enclosure, TurboGXplus frame buffer, 32MB, and 2.1GB internal fast SCSI-2 disk.	$4,695	A*
SPARCstation 4, SPARCstation 5	**UG-S4-S5-TX1-170** Chassis upgrade to SPARCstation 5 Model 170 with modified system enclosure, TurboGX frame buffer, no memory, no disk.	$2,795	A*
BOARD UPGRADE			
SPARCstation 5 70, 80, or 110MHz System Board	**UGS5-70/85/110-170** Upgrade to SPARCstation 5 170MHz System Board with CPU.	$995	A*

NOTES for Upgrades:
- Requires Solaris 1.1.1 Version B or later, Solaris 1.x release, or Solaris 2.3. Hardware: 5/94 or later
- Additional memory, internal or external storage options must be ordered as separate line items.
- * Maximum discount may apply.

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Ultra Systems Part Numbering

A12 - UBA1 - 1E - 128ABC

- System
- Microprocessor Family
- Microprocessor Speed
- Type of E-Cache
- Number of Processors
- Monitor
- Frame Buffer
- Memory
- Disk
- "Non-Standard System" (optional)

System

A11 = Ultra 1 Model 140/170
A12 = Ultra 1 Model 140E/170E/200E
A14 = Ultra 2
A18 = Ultra 4000

Microprocessor Family

U = UltraSPARC

Microprocessor Speed

A = UltraSPARC 143 MHz
B = UltraSPARC 167 MHz
C = UltraSPARC 200 MHz
E = UltraSPARC 300 MHz

E-Cache Size

A = 512KB
B = 1 MB
C = 2 MB
D = 4 MB

Monitor

1 = 20" color
2 = 17" color
13 = 17" entry color
4 = 20" color (S. Hemisphere)
5 = 17" color (S. Hemisphere)
6 = 17" entry color (S. Hemisphere)
9 = Headless

Frame Buffer

A = TGX
E = Creator
F = Creator 3D
G = (reserved)
N = No Frame Buffer
S = Server

Disk

AA = 1GB
AB = 2.1GB
AC = 4.2GB
CB = 2.1GB + CD
CC = 4.2GB + CD
CD = 4.2GB + SunCD 12
CE = 2.1GB + SunCD 12
EB = 2 x 2.1GB + CD
EE = 2 x 2.1GB + SunCD 12
NC = CD
ND = SunCD 12
NN = Diskless

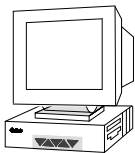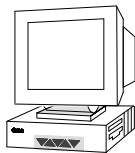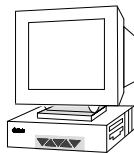|	Ultra 1/Ultra Enterprise 1 Model 170	Ultra 1 Model 170E	Ultra 1 Model 200E
Packaging	Desktop	Desktop	Desktop
Performance	Model 170	Model 170E	Model 200E
SPECint95	5.56	5.56	7.44
SPECfp95	9.06	9.06	10.40
SPECbase_int95	5.26	5.26	6.62
SPECbase_fp95	8.45	8.45	9.79
AIM 3	1305	1450	N/A
LADDIS	1812	2102	N/A
Performance			
Architecture	UltraSPARC-I	UltraSPARC-I	UltraSPARC-I
Clock rate	167MHz	167MHz	200MHz
Cache on-chip	16KB I-cache, 16KB D-cache	16KB I-cache, 16KB D-cache	16KB I-cache, 16KB D-cache
Cache external	512KB	512KB	512KB
No. of Processors	1	1	1
System Memory			
Standard	64MB	128MB	128MB
Maximum	1GB	1GB	1GB
Memory type	ECC	ECC	ECC
Bandwidth	288 bits	288 bits	288 bits
Total memory slots	8	8	8
SIMM size	16, 32, 64, 128MB (pairs)	16, 32, 64, 128MB (pairs)	16, 32, 64, 128MB (pairs)
Disk Storage			
SCSI bandwidth	10MB/sec. (8-bit fast)	20MB/sec. (16-bit fast)	20MB/sec. (16-bit fast/wide)
Standard	2.1GB	2.1GB	2.1GB
Maximum internal	8.4GB	8.4GB	8.4GB
Maximum external	147GB	147GB	147GB
I/O Architecture			
SBus slots	3 (32/64-bit, 25MHz)	2 (32/64-bit, 25MHz)	2 (32/64-bit, 25MHz)
Graphics (UPA Slots)	No	1 (83MHz)	1 (83MHz)
Serial ports	2	2	2
Parallel ports	1	1	1
Audio	16-bit	16-bit	16-bit
Speaker	Internal	Internal	Internal
Network Ports			
AUI Ethernet	Yes	Yes (requires MII adapter)	Yes (requires MII adapter)
Twisted-pair Ethernet	Yes (10 Mbps)	Yes (10/100 Mbps)	Yes (10/100 Mbps)
ISDN BRI	Optional	Optional	Optional
Supported Graphics Options	TurboGX	Creator, Creator3D	Creator, Creator3D
Solaris License	Solaris 2.5.1 or later	Solaris 2.5.1 Hardware: 1/96 or later	Solaris 2.5.1 or later

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Ultra 1 and Ultra Enterprise 1 - Model 170

Ultra 1 Model 170 with One 167 MHz UltraSPARC-I Processor and 512KB External Cache:

Part Number	Description	List Price	Discount Category
DESKTOP SYSTEMS			
A11-UBA1-13A-T64AB	17" entry color monitor, TurboGX, 64MB, 2.1GB 5400 RPM internal fast SCSI-2 disk	$7,995	A
A11-UBA1-2A-T64AB	17" color monitor, TurboGX, 64MB, 2.1GB 5400 RPM internal fast SCSI-2 disk	$8,495	A
A11-UBA1-1A-T64AB	20" color monitor, TurboGX, 64MB, 2.1GB 5400 RPM internal fast SCSI-2 disk	$9,195	A
SERVER CONFIGURATIONS			
A11-UBA1-9S-064CE	Ultra Enterprise 1 Model 170 with 64MB, 2.1GB 5400 RPM internal fast SCSI-2 disk, 644MB internal SunCD 12, and Solaris server license.	$7,495	A
A11-UBA1-9S-128EE	Ultra Enterprise 1 Model 170 with 128MB, 2x2.1GB 5400 RPM internal fast SCSI-2 disk, 644MB internal SunCD 12, and Solaris server license.	$8,995	A
A11-UBA1-9S-256EE	Ultra Enterprise 1 Model 170 with 256MB, 2x2.1GB 5400 RPM internal fast SCSI-2 disk, 644MB internal SunCD 12, and Solaris server license.	$12,995	A

NOTES: All Ultra 1 Model 170 configurations and upgrades require Solaris 2.5 or later Solaris 2.x release.

- All systems orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

Upgrades to Ultra 1 Model 170:

From	Part Number and Description	List Price	Discount Category
DESKTOP UPGRADES			
SPARCstation 1 & 1+, SLC, ELC, IPC, Classic	**UGFS-UBA1-1A-T64AB** Full system upgrade to Ultra 1 Model 170 with 20" color monitor, TGX graphics, 64MB, 2.1GB internal fast SCSI-2 disk	$8,195	A*
SPARCstation 2, IPX, LX	**UGS2-UBA1-9A-T64AB** Chassis upgrade to Ultra 1 Model 170 with TGX graphics, 64MB, 2.1GB internal fast SCSI-2 disk	$6,995	A*
SPARCstation 10	**UG10-UBA1-9A-T64AB** Chassis upgrade to Ultra 1 Model 170 with TurboGX, 64MB, 2.1GB internal fast SCSI-2 disk	$5,495	A*
SPARCstation 20	**UG20-UBA1-9N-T00NN** Chassis upgrade to Ultra 1 Model 170 with no graphics, memory, or disk	$4,495	A*
SERVER UPGRADES			
Any SPARCserver	**UG-S-UBA-9S-064CE** Chassis upgrade to Ultra Enterprise 1 Model 170 with 64MB, 2.1GB internal fast SCSI-2 disk, and SunCD 12	$6,745	A*
Any SPARCserver	**UG-S-UBA-9S-128EE** Chassis upgrade to Ultra Enterprise 1 Model 170 with 64MB, 2x2.1GB internal fast SCSI-2 disk, and SunCD 12	$8,245	A*

* Maximum discount may apply.

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Ultra 1 and Ultra Enterprise 1 - Model 170E

Ultra 1 Model 170E with One 167 MHz UltraSPARC-I Processor and 512KB External Cache:

Part Number	Description	List Price	Discount Category
	DESKTOP CREATOR GRAPHICS SYSTEM		
A12-UBA1-1E-128AB	20" color monitor, Creator, 128MB, 2.1GB 7200 RPM internal fast/wide SCSI-2 disk	$12,995	A
	DESKTOP CREATOR3D GRAPHICS SYSTEM		
A12-UBA1-1F-128AB	20" color monitor, Creator3D, 128MB, 2.1GB 7200 RPM internal fast/wide SCSI-2 disk	$13,995	A

NOTES: All Ultra 1 Model 170E configurations and upgrades require Solaris 2.5 or later Solaris 2.x release. Hardware: 1/96 or higher.

- The Ultra 1 Model 170E has a wide SCSI connector on the back panel (68-pin). If narrow SCSI devices are to be connected, a conversion cable (50-68 pin) is needed (X903A or X904A). See Accessories section.

- All systems orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

* Maximum discount may apply.

Upgrades to Ultra 1 Model 170E:

From	Part Number and Description	List Price	Discount Category
	DESKTOP CREATOR GRAPHICS UPGRADES		
SPARCstation 1/1+, IPC, SLC, ELC, Classic	**UGFS-UBA-1E-128AB** Full system upgrade to Ultra 1 Model 170E with 20" color monitor, Creator, 128MB, 2.1GB internal fast SCSI-2 disk	$10,850	A*
SPARCstation 2, IPX, LX	**UGSS2UBA-9E-128AB** Chassis upgrade to Ultra 1 Model 170E with Creator, 128MB, 2.1GB internal fast SCSI-2 disk	$9,350	A*
SPARCstation 4, 5	**UGS4/5UBA9E-128NN** Chassis upgrade to Ultra 1 Model 170E with Creator, 128MB, no disk	$6,300	A*
SPARCstation 10	**UGS10UBA-9E-128AB** Chassis upgrade to Ultra 1 Model 170E with Creator, 128MB, 2.1GB internal fast SCSI-2 disk	$7,150	A*
SPARCstation 20	**UGS20UBA-9E-000NN** Chassis upgrade to Ultra 1 Model 170E with Creator graphics, no memory, no disk	$5,300	A*
	DESKTOP CREATOR3D GRAPHICS UPGRADES		
SPARCstation 1/1+, IPC, Classic	**UGFS-UBA-1F-128AB** Full system upgrade to Ultra 1 Model 170E with 20" color monitor, Creator3D, 128MB, 2.1GB internal fast SCSI-2 disk	$11,850	A*
SPARCstation 2, IPX, LX	**UGSS2UBA-9F-128AB** Chassis upgrade to Ultra 1 Model 170E with Creator3D, 128MB, 2.1GB internal fast SCSI-2 disk	$10,350	A*
SPARCstation 10	**UGS10UBA-9F-128AB** Chassis upgrade to Ultra 1 Model 170E with Creator3D, 128MB, 2.1GB internal fast SCSI-2 disk	$8,150	A*
SPARCstation 20	**UGS20UBA-9F-000NN** Chassis upgrade to Ultra 1 Model 170E with Creator3D graphics, no memory, no disk	$6,300	A*

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Ultra 1 and Ultra Enterprise 1 - Model 200E

Configurations Available - Ultra 1 Model 200E with One 200 MHz UltraSPARC-I Processor and 512KB External Cache:

Part Number	Description	List Price	Discount Category
DESKTOP CREATOR GRAPHICS SYSTEMS			
A12-UCA1-1E-128AB	Creator, 20" color monitor, 128MB (2 x 64MB SIMMs), 2.1GB 7200 RPM internal fast SCSI-2 disk	$16,495	A
A12-UCA1-1E-512AB	Creator, 20" color monitor, 128MB (4 x 128MB SIMMs), 2.1GB 7200 RPM internal fast SCSI-2 disk	$26,495	A
DESKTOP CREATOR3D GRAPHICS SYSTEMS			
A12-UCA1-1F-128AB	Creator 3D, 20" color monitor, 128MB (2 x 64MB SIMMs), 2.1GB 7200 RPM internal fast SCSI-2 disk	$17,495	A
A12-UCA1-1F-512AB	Creator 3D, 20" color monitor, 512MB (4 x 128MB SIMMs), 2.1GB 7200 RPM internal fast SCSI-2 disk	$27,495	A

NOTES: All Ultra 1 Model 170 configurations and upgrades require Solaris 2.5 or later Solaris 2.x release.

- All systems orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

* Maximum discount may apply.

Upgrades to Ultra 1 Model 200E:

From	Part Number and Description	List Price	Discount Category
DESKTOP CREATOR GRAPHICS UPGRADES			
SPARCstation 1/1+, IPC, SLC, ELC, Classic	**UGFS-12UCA11E128AB** Full system upgrade to Ultra 1 Model 200E with Creator graphics, 20" color monitor, 128MB, 2.1GB internal fast SCSI-2 disk	$14,350	A*
SPARCstation 2, IPX, LX	**UGS2-12UCA19E128AB** Chassis upgrade to Ultra 1 Model 200E with Creator graphics, 128MB, 2.1GB internal fast SCSI-2 disk	$12,850	A*
SPARCstation 4, 5	**UGS5-12UCA19E128NN** Chassis upgrade to Ultra 1 Model 200E with Creator graphics, 128MB, no disk	$9,800	A*
SPARCstation 10	**UG10-12UCA19E128AB** Chassis upgrade to Ultra 1 Model 200E with Creator graphics, 128MB, 2.1GB internal fast SCSI-2 disk	$10,650	A*
SPARCstation 20	**UG20-12UCA19E000NN** Chassis upgrade to Ultra 1 Model 200E with Creator graphics, no memory, no disk	$8,800	A*
DESKTOP CREATOR3D GRAPHICS UPGRADES			
SPARCstation 1/1+, IPC, SLC, ELC, Classic	**UGFS-12UCA11F128AB** Full system upgrade to Ultra 1 Model 200E with Creator3D graphics, 20" color monitor, 128MB, 2.1GB internal fast SCSI-2 disk	$15,350	A*
SPARCstation 2, IPX, LX	**UGS2-12UCA19F128AB** Chassis upgrade to Ultra 1 Model 200E with Creator3D graphics, 128MB, 2.1GB internal fast SCSI-2 disk	$13,850	A*
SPARCstation 10	**UG10-12UCA19F128AB** Chassis upgrade to Ultra 1 Model 200E with Creator3D graphics, 128MB, 2.1GB internal fast SCSI-2 disk	$11,650	A*
SPARCstation 10	**UG10-12UCA19F512AB** Chassis upgrade to Ultra 1 Model 200E with Creator3D graphics, 512MB, 2.1GB internal fast SCSI-2 disk	$21,650	A*
SPARCstation 20	**UG20-12UCA19F000NN** Chassis upgrade to Ultra 1 Model 200E with Creator3D graphics, no memory, no disk	$9,800	A*
MODULE & SYSTEM BOARD UPGRADE			
Ultra 1 - 140/170 system board	**UG-U11-U12-200-SFB** Board upgrade to Ultra 1 Model 200E CPU board and Creator frame buffer.	$10,995	A*

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